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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/707,456 | 12/16/2003 | Yao-Ching Su | 11608-US-PA | 1455 |
| 31561 | 7590 | 01/11/2005 | EXAMINER | |
| JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE 7 FLOOR-1, NO. 100 ROOSEVELT ROAD, SECTION 2 TAIPEI, 100 TAIWAN | | | | TRAN, THUY V |
| ART UNIT | | PAPER NUMBER | | |
| | | 2821 | | |
| DATE MAILED: 01/11/2005 | | | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|------------------------|---------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/707,456 | SU ET AL. |
| | Examiner | Art Unit |
| | Thuy V. Tran | 2821 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 December 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 16 December 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

This is a response to the Applicants' filing on 12/16/2003. In virtue of this filing, claims 1-18 are currently presented in the instant application.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Inventorship

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Drawings

3. The drawings submitted on 12/16/2003 are accepted.

Claim Objections/ Minor Informalities

4. Claims 1-3, 7-9, and 12-15 are objected to because of the following informalities:

Claim 1, line 8, --data- should be inserted between "common" and "electrode";

Claim 2, line 2, --each of-- should be inserted between "wherein" and "said" (first occurrence);

Claim 2, line 3, "are" should be changed to --has a--;

Claim 3, line 2, --each of-- should be inserted between “wherein” and “said” (first occurrence);

Claim 2, line 3, “is” should be changed to --has a--;

Claim 7, line 15, “throughsaid” should be changed to --through said--;

Claim 8, line 2, --each of-- should be inserted between “wherein” and “said” (first occurrence); “are” (first occurrence) should be changed to --has a--; and --said sub-pixels-- should be inserted between “and” and “are” (second occurrence);

Claim 9, line 2, --each of-- should be inserted between “wherein” and “said”; “is” should be changed to --has a--;

Claim 12, line 2, “sub-pixel” should be changed to --sub-pixels--;

Claim 12, line 3, “light” should be changed to --lights--;

Claim 13, line 8, --data-- should be inserted between “common” and electrodes”;

Claim 13, line 12, --said-- should be inserted between “of” and “sub-pixels” (first occurrence); and “are” should be changed to --is--;

Claim 14, line 2, --each of-- should be inserted between “wherein” and “said” (first occurrence);

Claim 14, line 3, “are” should be changed to --has a--; and

Claim 15, line 2, --each of-- should be inserted between “wherein” and “said” (first occurrence).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Irie et al. (Pub. No.: US 2003/0025708 A1).

With respect to claim 1, Irie et al. discloses, in Figs. 2 and 4, an alternating current plasma display panel comprising a plurality of pixels (made of R, G, B; see Fig. 4), a plurality of common data electrodes (A's; see Fig. 2), and a plurality of row electrodes (X, Y; see Fig. 2); wherein each of said plurality of pixels includes a first sub-pixel [R], a second sub-pixel [G], and a third sub-pixel [B] arranged in a delta configuration (see Fig. 4); said first sub-pixel [R], said second sub-pixel [G], and said third sub-pixel [B] are configured for emitting different visible lights respectively; said plurality of common data electrodes are disposed below said plurality of pixels (see Fig. 2); and said plurality of row electrodes are disposed above said plurality of pixels; wherein (i) three of said second sub-pixels [G] and three of said third sub-pixels [B] alternately enclose each of said first sub-pixels [R] (see Fig. 4), (ii) three of said first sub-pixels [R] and three of said third sub-pixels [B] alternately enclose each of said second sub-pixels [G] (see Fig. 4), and (iii) three of said first sub-pixels [R] and three of said second sub-pixels [G]

alternately enclose each of said third sub-pixels [B] (see Fig. 4), and (iv) each of said plurality of common data electrodes [A] is straight arranged and passes through a same amount of said first sub-pixels [R], said second sub-pixels [G], and said third sub-pixels [B] (see Fig. 2 and 4).

With respect to claim 2, Irie et al. discloses, in Fig. 4, that each of said first sub-pixels [R], said second sub-pixels [G], and said third sub-pixels [B] has a hexagonal shape, and said first sub-pixels, said second sub-pixels, and said third sub-pixels are arranged in a honeycombed pattern (see Fig. 4).

With respect to claim 3, Irie et al. discloses, in Fig. 4, that each of said first sub-pixels, said second sub-pixels, and said third sub-pixels has a polygonal shape.

With respect to claim 4, Irie et al. discloses, in Fig. 2, that each of said plurality of row electrodes includes a bus electrode [42] and a sustain electrode [41].

With respect to claim 5, Irie et al. discloses, in Fig. 2, that a material of said sustain electrode includes a transparent conducting material (see paragraph [0032], lines 7-8).

With respect to claim 6, Irie et al. discloses, in Fig. 4, that said first sub-pixels, said second sub-pixels, and said third sub-pixels are for emitting red, green, and blue visible lights, respectively.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 7-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irie et al. (Pub. No.: US 2003/0025708 A1).

With respect to claim 7, Irie et al. discloses, in Figs. 2 and 4, an alternating current plasma display panel comprising a plurality of pixels [R, B, G], a plurality of common data electrodes [A], and a plurality of row electrodes [X, Y], wherein each of said plurality of pixels includes three sub-pixels [R, B, G] arranged in a delta configuration (see Fig. 4); said three sub-pixels are configured for emitting different visible lights respectively; said plurality of common electrodes [A] are disposed below said plurality of sub-pixels (see Fig. 2); said plurality of row electrodes are disposed above said plurality of sub-pixels (see Fig. 2), wherein each of said plurality of common data electrodes is straight arranged and passes through said each row of said sub-pixels (see Fig. 4). Irie et al. does not teach that the sub-pixels [R, B, G] are arranged in a way so that each row of said sub-pixels is for emitting a same visible light and two adjacent rows are for emitting different visible lights. However, this difference is not of patentable merits since such arrangement of a color production for the rows of the sub-pixels does not provide any distinguished effects except different colors. Therefore, to arrange the sub-pixels of the display panel of Irie et al. in a way to access a same visible light in each row of the sub-pixels and different visible lights in two adjacent rows as claimed would have been deemed as an obvious development to a person skilled in the art.

With respect to claim 8, Irie et al. discloses, in Fig. 4, that each of said sub-pixels [R, B, G] has a hexagonal shape, and said sub-pixels are arranged in a honeycombed pattern (see Fig. 4).

With respect to claim 9, Irie et al. discloses, in Fig. 4, that each of said sub-pixels has a polygonal shape.

With respect to claim 10, Irie et al. discloses, in Fig. 2, that each of said plurality of row electrodes includes a bus electrode [42] and a sustain electrode [41].

With respect to claim 11, Irie et al. discloses, in Fig. 2, that a material of said sustain electrode includes a transparent conducting material (see paragraph [0032], lines 7-8).

With respect to claim 12, Irie et al. discloses, in Fig. 4, that each row of said sub-pixels is for emitting one of red, green, and blue visible lights.

With respect to claim 13, Irie et al. disclose, in Figs. 2 and 4, an alternating current plasma display panel comprising a plurality of pixels [R, B, G], a plurality of common data Electrodes [A], and a plurality of row electrodes [X, Y], wherein each of said plurality of pixels including a first sub-pixel [R], a second sub-pixel [B], and a third sub-pixel [G] is arranged in a delta configuration (see Fig. 4); said first sub-pixel [R], said second sub-pixel [B], and said third sub-pixel [G] are for emitting different visible lights respectively; said plurality of common electrodes are disposed below said plurality of pixels (see Fig. 2); and said plurality of row electrodes are disposed above said plurality of pixels (see fig. 2), wherein each of said plurality of common data electrodes is straight arranged and passing through a same amount of said first sub-pixels, said second sub-pixels, and said third sub-pixels. Irie et al. does not teach that each row of said sub-pixels is arranged with said first sub-pixels [R], said second sub-pixels [B], and said third sub-pixels [G] in a cyclic order, only one of six sub-pixels enclosing one of said first pixels is a first pixel, only one of six sub-pixels enclosing one of said second pixels is a second pixel, and only one of six sub-pixels enclosing one of said third pixels is a third pixel. However,

this difference is not of patentable merits since such arrangement of the sub-pixels in a cyclic order does not provide any distinguished effects except different colors. Therefore, to arrange the sub-pixels of the display panel of Irie et al. in a way as claimed to access a desired color production would have been deemed as an obvious development to a person skilled in the art.

With respect to claim 14, Irie et al. discloses, in Fig. 4, that each of said sub-pixels [R, B, G] has a hexagonal shape, and said sub-pixels are arranged in a honeycombed pattern (see Fig. 4).

With respect to claim 15, Irie et al. discloses, in Fig. 4, that each of said sub-pixels has a polygonal shape.

With respect to claim 16, Irie et al. discloses, in Fig. 2, that each of said plurality of row electrodes includes a bus electrode [42] and a sustain electrode [41].

With respect to claim 17, Irie et al. discloses, in Fig. 2, that a material of said sustain electrode includes a transparent conducting material (see paragraph [0032], lines 7-8).

With respect to claim 18, Irie et al. discloses, in Fig. 4, that said first sub-pixels, said second sub-pixels, said third sub-pixels are for emitting red, green, and blue visible lights, respectively.

Citation of relevant prior art

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Harada et al. (U.S. Patent No. 6,741,031) discloses a display device.

Prior art Fujimoto et al. (U.S. Patent No. 6,498,593) discloses a plasma display device.

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Prior art Whang et al. (U.S. Patent No. 6,373,195) discloses an AC plasma display device.

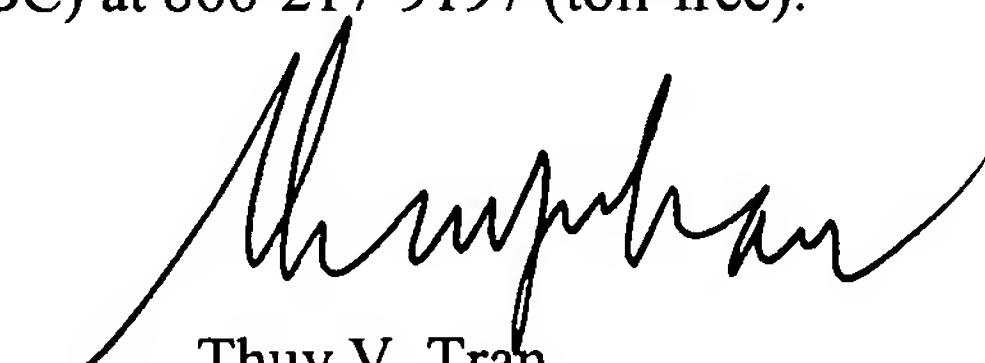
Prior art Betsui et al. (U.S. Patent No. 5,967,872) discloses a method for fabricating a plasma display panel.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy V. Tran whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:00 AM -5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thuy V. Tran
Primary Examiner
Art Unit 2821